

NIH GUIDE

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The GUIDE is published at irregular intervals to announce scientific initiatives and to provide policy and administrative information to individuals and organizations who need to be kept informed of opportunities, requirements, and changes in grants and contracts activities administered by the National Institutes of Health.

Two types of supplements are published by the respective awarding units. Those printed on yellow paper concern contracts: solicitations of sources and announcement of availability of requests for proposals. Those printed on blue paper concern invitations for grant applications in well-defined scientific areas to accomplish specific program purposes.

NOTICE

SUPPORT OF SCIENTIFIC MEETINGS

CHANGE IN APPLICATION AND FUNDING PROCEDURES

In the past, the John E. Fogarty International Center for Advanced Study in the Health Sciences, National Institutes of Health, has received proposals, or meeting prospecti, for partial support of scientific meetings of various types held in the U.S.A. or abroad. That program, as currently operated, is being discontinued and the receipt of proposals for support of scientific meetings will be transferred to the Division of Research Grants, National Institutes of Health, as of 1 February, 1981.

Application Procedure: Applications for partial support of scientific meetings should be made on the grant application form PHS 398. Guidance for preparation of the application can be obtained from the NIH publication: "Support of Scientific Meetings: Special Information and Instructions." The application forms and the guidance publication can usually be obtained from the office of sponsored research of most universities, or from the Division of Research Grants, NIH. Application receipt dates will be February 1, June 1, and October 1.

Formal submission of completed applications should be to:

Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
5333 Westbard Avenue
Bethesda, Maryland 20205

Inquiries concerning meeting support applications can be made via telephone:
(301) 496-7441.

NOTICE

MINORITY BIOMEDICAL SUPPORT REVISED DIRECTORY NOW AVAILABLE

The 1980 revised directory of research study projects currently under way in NIH's Minority Biomedical Support Program (MBS) has been published and is available free.

Titled **Minority Biomedical Support Program, A Research Resources Directory**, the booklet lists 80 institutions and serves as a ready reference on the research activities and participants in the Division of Research Resources-supported program.

In addition to the current listings of MBS grantee institutions throughout the country and Puerto Rico, the directory identifies the names of program directors, the principal investigators, the number of student investigators, and the titles and descriptions of each project involved in the biomedical research effort.

The booklet lists special laboratory instruments and facilities that may be available on a limited basis to other MBS programs in the area or region.

A map and geographical index is provided, listing grantee institutions by state and within each state, in alphabetical order according to the name of the institution.

A single free copy of **Minority Biomedical Support Program, A Research Resources Directory** may be secured by writing to the Research Resources Information Center, 1776 East Jefferson Street, Rockville, Maryland 20852; or by request from the Office of Science and Health Reports, Division of Research Resources, National Institutes of Health, Bethesda, Maryland 20205.

ANNOUNCEMENT

THE INFLUENCE OF PSYCHOSOCIAL STRESSORS ON SMOKING CESSATION
AND MAINTENANCE OF CESSATION

THE NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute supports a variety of research programs related to smoking as a risk factor in cardiovascular and pulmonary disease. These programs include epidemiologic and toxicologic studies, as well as research on educational and health behavior interventions.

The objective of this program announcement is to encourage research activities which will clarify the influence of psychosocial stressors on smoking, smoking cessation, and the maintenance of cessation. It has been hypothesized that cigarette smoking may function as a stress reducing or coping behavior for certain individuals. These individuals apparently increase their smoking behavior in stressful circumstances; if they stopped smoking, there is a tendency towards relapse under such circumstances. The data in support of this hypothesis has been derived from several sources, but lacks sufficient integration to provide a comprehensive and definitive statement concerning the nature of the stress-smoking interaction. Further research is needed to clarify this issue and to provide practical direction for smoking cessation programs.

Examples of relevant questions include:

1. Can the extent to which an individual relies on smoking to cope with environmental and social stressors be used as a predictor for the most appropriate cessation approach?
2. Can appropriate strategies be developed for training smokers in the use of alternative coping behaviors as a means of enhancing smoking cessation and cessation maintenance (e.g., stress management training)?
3. Are there specific situational stressors which increase the likelihood of relapse?
4. Are there differential responses to the stress-smoking interaction in subgroups of smokers which influence the cessation process? Examples of subgroups include: women smokers, smokers of low nicotine yield cigarettes, and the large numbers of smokers who have quit without formal cessation programs.

This program is described in the Catalog of Federal Domestic Assistance number 13.837, Heart and Vascular Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency Review.

This list is intended to provide examples only and does not preclude the submission of applications involving other research approaches to the basic issue under consideration.

The 1979 Surgeon General's Report emphasized that smoking is especially threatening for smokers who possess certain additional risk factors which increase their susceptibility to the adverse health effects of smoking. The NHLBI is particularly interested in research applications which target those adult smokers who are at increased risk for cardiovascular disease as a result of the combination of smoking and other exacerbating personal and/or environmental characteristics. Two examples of such high risk populations are post-myocardial infarction smokers who continue to smoke, and employees exposed to workplace chemicals which may have increased adverse effects on the heart and blood vessels when combined with smoking. Since major targeted research programs addressing smoking by adolescents and smoking by pregnant women are already supported by the National Institute of Child Health and Human Development, these two populations are excluded from the scope of this program announcement.

It is expected that all applications responding to this program announcement will be sensitive to the range of methodological and conceptual issues which may influence the effectiveness of a given smoking cessation program. Examples of these issues are: the necessity of long-term assessment and follow-up, verification of cessation through the use of objective measures of cigarette consumption, and evaluation of subject-treatment matching.

APPLICATION SUBMISSION AND REVIEW

Application receipt dates for this program announcement are the regular March 1, July 1, and November 1 dates. Applications received after any one receipt date will be considered and reviewed together with those received by the next receipt date. The earliest possible award date will be approximately nine months after the receipt date.

Applicants should use the regular research grant application form, PHS 398, which is available at the applicant's institutional Application Control Office or from the Division of Research Grants, NIH. To identify responses to this program announcement, it is requested that the common title, "Psychosocial Stressors, Smoking Cessation and CV Risk" be used by all applicants. The completed application and six copies should be mailed to:

Division of Research Grants
Westwood Building, Room 240
National Institutes of Health
Bethesda, Maryland 20205

The Division of Research Grants will assign applications to study sections for review according to the NIH process for regular research grant applications. Approved applications will compete for available funds with all other approved grant applications assigned to the National Heart, Lung, and Blood Institute.

A letter of intent to submit an application in response to this announcement is requested in order to alert the Institute to the volume of applications for a given deadline. The letter should state the title of the project, the principal investigator, sponsoring institution, and anticipated date of submission. This information is for Institute planning purposes only, and does not obligate the investigator to submit an application. Please address the letter of intent and requests for additional information to:

Dr. Margaret E. Mattson
Behavioral Medicine Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building, Room 604
Bethesda, Maryland 20205
Telephone: (301) 496-9380

ANNOUNCEMENT**RESEARCH IN SICKLE CELL DISEASE:****HEMOSTATIC AND COAGULATION FACTORS****NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

The National Heart, Lung, and Blood Institute (NHLBI), Division of Blood Diseases and Resources, supports programs designed to reduce the mortality and morbidity of sickle cell disease by improving diagnostic and treatment methodologies and providing resources for biomedical research, both at the basic and clinical levels.

The purpose of this program announcement is to encourage well-conceived research efforts to investigate the possible role(s) of soluble and cellular clotting factors in the pathogenesis of sickle cell disease. Applications are sought which will lead to a better understanding of the contributions, if any, of the hemostatic, coagulation and fibrinolytic systems in the vaso-occlusive episode which is the clinical "hallmark" of sickle cell disease. The frequency, severity, and variability of this clinical event, along with psychological factors, complicate efforts for an objective assessment and the available data on the role of hemostatic factors are contradictory and inconclusive. Therefore, we wish to stimulate research studies relevant to clarifying this area of special emphasis.

Applicants should use the regular research grant application (PHS 398). If the institution's business office or central application control office does not have this form, an individual copy may be requested by writing to:

Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Bethesda, Maryland 20205
Telephone: (301) 496-7441

All applications will be reviewed through the Division of Research Grants Study Section mechanism and by the National Heart, Lung, and Blood Advisory Council. Applications recommended for approval will compete for available funds with all other approved applications assigned to NHLBI. There are three receipt dates each year for new applications: March 1, July 1, November 1.

Inquiries should be directed to the Sickle Cell Disease Branch, National Heart, Lung, and Blood Institute, Federal Building, Room 504A, 7550 Wisconsin Avenue, Bethesda, Maryland 20205; Telephone: (301) 496-6931.

This program is described in the Catalog of Federal Domestic Assistance number 13.839, Blood Diseases and Resources Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency Review.

ANNOUNCEMENT

SMALL VESSEL PROSTHESES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute has a specific interest in supporting research which will lead to the development of small caliber (5mm or less) vascular grafts. In current surgical practice, autologous vascular tissue is used whenever possible for repair or replacement procedures involving small caliber vessels because these tissues maintain patency better than commercially available prostheses. There is a clinical need for small caliber grafts which will remain patent when used in coronary bypass, pediatric vascular repair, peripheral vascular replacement, and vascular access for renal dialysis or chemotherapy. Grafts with poor runoff are particularly prone to failure; autologous vein grafts for coronary bypass often develop intimal proliferation, narrowing the lumen and leading to failure. The mechanisms of failure, or appropriate means to prevent or correct such failures, have not been identified. The National Heart, Lung, and Blood Institute encourages interested investigators to submit meritorious research grant applications to study basic mechanisms of failure and/or seek potential solutions to problems which will lead to the development of more successful small vessel prostheses.

A long-range goal of this program is to develop natural or synthetic graft materials and the clinical protocols for implantation of small caliber vascular prostheses in humans. The development of successful small vessel prostheses may involve contributions from materials science, surface chemistry, rheology, pharmacology, hematology, vascular surgery and veterinary medicine. Applications submitted in response to this announcement should have a clearly focused hypothesis regarding the failure mechanism of currently available materials when used as grafts of this small size and for human patient use. The research plan may propose a direct demonstration of the importance of this failure mechanism, or may seek new ways to prevent failure. It is not necessary that the proposal actually test grafts or grafting procedures but it may examine relevant discrete components of the problem. While graft failure may be the result of complex interactions, experimental designs should include appropriate controls with alteration of a single variable at a time.

Potential studies might involve investigation and demonstration of failure mechanisms at low flow using model systems or through analysis of retrieved

This program is described in the Catalog of Federal Domestic Assistance number 13.837, Heart and Vascular Diseases Research. Grants will be awarded under the authority of the Public Health Service Act, Section 301 (42 USC 241) and administered under PHS grant policies and Federal Regulations, most specifically at 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency Review.

implants, development of new materials with appropriate characterization and validation, identification of pharmacologic regimens to prevent failure, or development and validation of appropriate animal models for specified applications; other topic areas will also be appropriate. Research may involve currently available or new materials; studies may be conducted in animals, or in adults or children with due regard for all relevant ethical considerations.

Experimental methods should identify the techniques to be employed to characterize the physical and chemical properties of the graft materials. The surface chemistry, porosity, roughness, and compliance of a graft may contribute to its performance in vivo. Investigations which focus on any alteration or manipulation of a physicochemical property should discuss methodology to actually measure this variable. NHLBI has recently published Guidelines on Physicochemical Characterization of Materials (NIH Publication No. 80-2186) to aid researchers in describing the bulk and surface properties of materials. In addition, investigators may request NIH to provide them with samples of well-characterized polymers (polydimethylsiloxane, polyethylene, and FEP Teflon) to serve as primary reference materials in providing baseline data. Guidelines for studies of blood-material interactions are also available (NIH Publication No. 80-2185); these guidelines discuss in vitro, ex vivo, and in vivo testing techniques and summarize data from several animal models for testing cardiovascular devices.

Support for this research is available through investigator initiated research grants. Application receipt dates are March 1, July 1, and November 1. Applications should be submitted on form PHS 398; these forms are available in the business or grants and contracts office at most academic and research institutions or from the Division of Research Grants, NIH. In order to identify the application as a response to this program announcement, check "yes" on Item 2 of the application face page with the title SMALL VESSEL PROSTHESES. The original and six copies should be submitted to:

Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
Bethesda, Maryland 20205

Applications received in response to this Program Announcement will be assigned by the Division of Research Grants to study sections for review according to the NIH process for regular research grant applications. Funding for this activity is in competition with all regular competing grant applications.

An additional copy of the application should be mailed to:

Dr. Frances A. Pitlick
Devices and Technology Branch
National Heart, Lung, and Blood Institute
Federal Building, Room 310
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Requests for additional information or questions regarding this program should be directed to Dr. Pitlick at (301) 496-1586.